

WHAT IS CLAIMED IS:

1. An implant device for implantation in the body of a subject to divert solid particles in body fluid flowing through a main passageway of the subject, from entering a branch passageway downstream of the main passageway, said implant device comprising:

an anchoring section of an expandable tubular construction for firmly anchoring the implant device in said branch passageway;

and a diverter section integrally formed with said anchoring section to project into said main passageway at the upstream side of said branch passageway when the anchoring section is anchored in the branch passageway;

said diverter section being constructed to permit flow of the body fluid through said main passageway, but including an outer surface facing the upstream side of the main passageway effective to divert solid particles in the body fluid from entering said branch passageway.

2. The device according to Claim 1, wherein said diverter section is formed with many openings therethrough so as to reduce turbulence of the fluid flow through said main passageway.

3. The device according to Claim 1, wherein said outer surface of the diverter section is of a convex configuration so as to reduce turbulence of the blood flow through said main passageway.

4. The device according to Claim 1, wherein said diverter section is of decreasing width in the direction towards the center of said main passageway.

5. The device according to Claim 1, wherein said diverter section is in the form of a curved planar sheet perforated with a plurality of openings therethrough.

6. The device according to Claim 1, wherein said anchoring section and said diverter section are formed of an open braided material.

7. The device according to Claim 6, wherein said diverter section is of bulbous configuration integrally formed with said anchoring section, and includes an opening at the downstream side communicating with the interior of the anchoring section.

8. The device according to Claim 6, wherein both said anchoring section and said diverter section are formed of an open braid cylinder such that one end of the open

braid cylinder constitutes said anchoring section for anchoring in the branch passageway, and the opposite end of said open braid cylinder constitutes said diverter section for projecting into said main passageway.

9. The device according to Claim 8, wherein said diverter section of the open braid cylinder is angled away from the anchoring section of the open braid cylinder in the downstream direction of fluid flow.

10. The device according to Claim 6, wherein said open braid material is formed of strands of at least two different diameters.

11. The device according to Claim 1, wherein the device includes a second anchoring section of an expandable tubular construction for firmly anchoring the device in said main passageway downstream of said branch passageway, said diverter section being secured between said first and second anchoring sections.

12. The device according to Claim 11, wherein said diverter section is of a planar configuration and of a width smaller than the diameter of said main passageway.

13. The device according to Claim 1, wherein the device is constructed and dimensioned for implantation in the aorta artery such that the anchoring section is to be anchored in the carotid artery and the diverter section is to project into the aorta lumen.

14. An implant device for implantation in the cardiovascular system of a subject to divert emboli in blood flowing through a main blood vessel of the subject, from entering a branch blood vessel downstream of the main blood vessel, said implant device comprising:

an anchoring section of an expandable tubular construction for firmly anchoring the implant device in said branch blood vessel;

and a diverter section integrally formed with said anchoring section to project into said main blood vessel at the upstream side of said branch blood vessel when the anchoring section is anchored in the branch blood vessel;

said diverter section being constructed to permit flow of the blood through said main blood vessel, and including an outer surface facing the upstream side of the main blood vessel effective to divert emboli in the blood from entering said branch blood vessel.

15. The device according to Claim 14, wherein said diverter section is formed with many openings therethrough so as to reduce turbulence of the blood flow through said main blood vessel.

16. The device according to Claim 14, wherein said outer surface of the diverter section is of a convex configuration so as to reduce turbulence of the blood flow through said main blood vessel.

17. The device according to Claim 14, wherein said diverter section is of decreasing width in the direction towards the center of said main blood vessel.

18. The device according to Claim 14, wherein said diverter section is in the form of a curved planar sheet perforated with a plurality of openings therethrough.

19. The device according to Claim 18, wherein said anchoring section and said diverter section are formed of an open braided material.

20. The device according to Claim 18, wherein said diverter section is of bulbous configuration integrally formed with said anchoring section, and includes an opening therethrough communicating with the interior of the anchoring section.

21. The device according to Claim 20, wherein both said anchoring section and said diverter section are formed of an open braid cylinder such that one end of the open braid cylinder constitutes said anchoring section for anchoring in the branch blood vessel, and the opposite end of said open braid cylinder constitutes said diverter section for projecting into said main blood vessel.

22. The device according to Claim 18, wherein said diverter section of the open braid cylinder is angled away from the anchoring section of the open braid cylinder in the downstream direction of blood flow.

23. The device according to Claim 14, wherein said open braid material is formed of strands of at least two different diameters.

24. The device according to Claim 14, wherein the device includes a second anchoring section of an expansible tubular construction for firmly anchoring the device in said main blood vessel downstream of said branch blood vessel, said diverter section being secured between said first and second anchoring sections.

25. The device according to Claim 24, wherein said diverter section is of a planar configuration and of a width smaller than the diameter of said main blood vessel.

26. The device according to Claim 14, wherein the device is constructed and dimensioned for implantation in the aorta artery such that the anchoring section is to be anchored in the carotid artery and the diverter section is to project into the aorta lumen.